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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,314	08/05/2002	Laura M McIntosh	83815-1402	7291

7590

08/04/2005

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EXAMINER

SMITH, RUTH S

ART UNIT

PAPER NUMBER

3737

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

TAK

Office Action Summary	Application No. 10/089,314	Applicant(s) MCINTOSH ET AL.	
	Examiner Ruth S. Smith	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 12-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 12-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/20/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

Claims 15-23 are objected to because of the following informalities: The limitations set forth conflict with the independent claims which set forth that the beam of light is either visible or near-infrared. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 15-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification, as originally filed, fails to disclose that the beam of light contains both visible and near-IR light. The specification discloses that the beam of light is either visible or near-IR light.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3-6,9-10,12-19,21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenet et al. Kenet et al disclose using any wavelength of light from white light (which includes both visible and infrared) to just visible or just infrared to obtain multispectral images. With respect to claims 3, 16, the wavelengths disclosed by Kenet et al would inherently correspond to the wavelengths as set forth. With respect to claims 5,6,18,19, in the absence of any showing of criticality or unexpected results, the specific wavelengths used within these ranges would have been an obvious design choice to one skilled in the art. The images can include global and local images which are compared to determine whether skin lesions are present. Such a comparison is

considered to include control and diseased portions of skin. The method is used to diagnose premelanomatous conditions. Therefore, it would have been obvious to one skilled in the art to have used such a method to determine the presence of some of the skin diseases set forth in that such are known types of premelanomatous conditions. It is a well known expedient in the art to take a biopsy of a diseased portion of skin based upon the determine diagnosis.

Claims 7,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenet et al as applied to claims 1,15 above, and further in view of Jackson et al, Richards-Kortum et al or Soller et al. It is a well known expedient in the art to average spectra to take into account variations that may be present in order to eliminate such from affecting the results. Examples of such is seen in Jackson et al, Richards-Kortum et al and Soller et al. Therefore, it would have been obvious to one skilled in the art to have further modified Kenet et al such that averaged spectra are used to eliminate unwanted variables from affecting the results.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenet et al as applied to claim 4 above, and further in view of Haaland et al. Haaland et al disclose classification of spectra for cell and tissue samples. One method of classification uses multivariate classification techniques. Multivariate classification techniques are applied to spectra from cell and tissue samples irradiated with infrared radiation to determine if the samples are normal or abnormal (cancerous). Mid and near infrared radiation can be used for in vivo and in vitro classifications using at least different wavelengths. It would have been obvious to one skilled in the art to have modified Kenet et al such that multivariate classification techniques are used to classify the tissue samples. Such a modification involves the selection of a known type of classification technique.

Response to Arguments

Applicant's arguments with respect to claims 1,3-10,12-23 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is 571-272-4745. The examiner can normally be reached on M-F 7:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ruth S. Smith
Primary Examiner
Art Unit 3737

RSS